



偏微分方程及其应用中心

学术报告

报告题目: **On Admissible Positions of Transonic Shocks for Steady Isothermal Euler Flows in a Horizontal Flat Nozzle under Vertical Gravity**

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地点: 思源楼 813

摘要: In this talk we are concerned with the existence of transonic shocks for 2-D steady isothermal Euler flows in a horizontal flat nozzle under vertical gravity. In particular, we focus on the contribution of the vertical gravity in determining the position of the shock front. For steady horizontal flows, the existence of normal shocks with the position of the shock front being arbitrary in the nozzle can be easily established. We will try to determine the position of the shock front as the state of the flow at the entrance of the nozzle and the pressure at the exit are slightly perturbed. This is a joint work with Dr. Xin Gao.